DEPARTMENT OF THE NAVY

NAVAL SURFACE WARFARE CENTER CARDEROCK DIVISION

CARDEROCK DIVISION NSWC ATTN: CODE 102 (BEN OH) BETHESDA, MD 20084-5000 (301)227-1477 (301)227-1041 FAX

TO: Steve Woolery

FROM: Ben Oh

Message:

Steve,

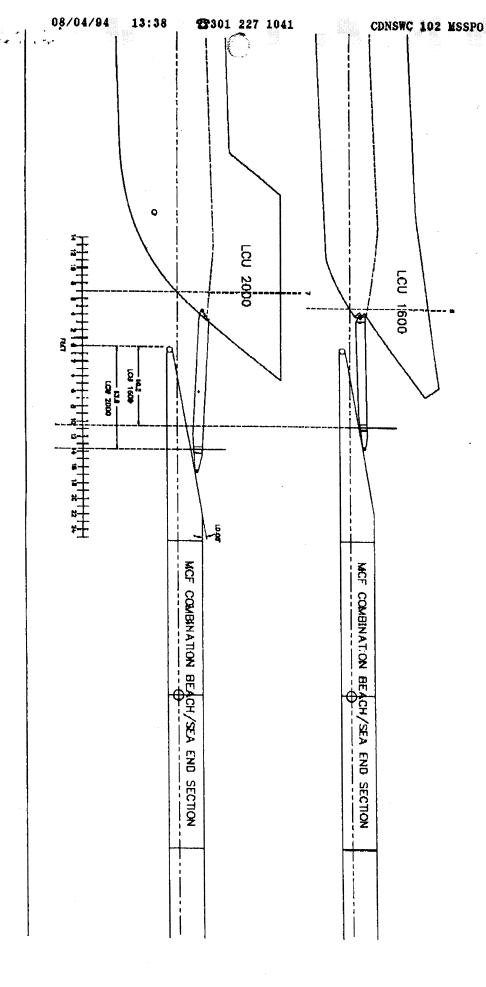
The attached diagram shows the optimum location for the Rhino Horn. The estimated optimum location is approximately 4 feet more inboard than what LSI is building to. Note on the diagram that LSI' horn location, 8 ft from tip of module, is very near the waterline. During the transition of cargo, the fwd end of both the lighter and the sea section will submerge and thereby increase the draft waterline. At this point, the Rhino horn (at LSI's location) may even be partly under water. Locating the Rhino horn up higher is better in terms of trim during cargo transfer. However, the lighter would have to get closer to the fwd end of beach/sea ramp - see next paragraph.

Note the proximity of the lighter bow hull to the sea end section. A fender should be installed on the tip of sea end section to prevent any possible damage. I will volunteer to design a fendering system for this application. Please call me to discuss.

It may be smart for us to consider requesting LSI to change the location of the Rhino Horn before its too late.

BEN

3 pages including cover sheet



APPROXIMATE RHINO HORN LOCATION ESTIMATED SEPARATELY FOR EACH VESSEL

APPROXIMATE COMPROMISED RHINO HORN LOCATION

